## Diseases in Cattle

Eye Lesions – Cancer Eye, Microphthalmia and Pink Eye

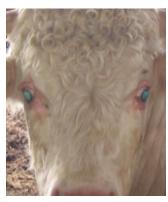


**Cancer eye** - Bovine ocular neoplasia includes a variety of benign and malignant skin tumors of the eyeball and eyelids. Benign tumors are growths that do not spread to other parts of the body and do not tend to grow into surrounding tissues. They can cause local problems with eye function, but do not affect the rest of the body. Malignant tumors are growths of cells that spread to other parts of the body and tend to invade surrounding tissues.

Cancer eye appears more frequently in cattle that have non-pigmented skin, especially around the eye. You can reduce the incidence of cancer eye in your herd by selecting breeding stock with dark pigmentation or color around the eyes and by culling affected animals and their offspring from the breeding herd. The peak age for cancer eye is between 7 and 8 years of age. It occurs infrequently in cattle less than 3 years of age.

Cattle with advanced lesions that have spread to other parts of the body or invaded the local tissues around the eye should be humanely destroyed and not transported to market. If presented, they will be condemned.

**Microphthalmia** - Microphthalmia, cataracts, retinal dysplasia, and retinal detachments are associated with hydrocephalus and in utero infection of calves with bovine viral diarrhea. Vitamin A deficiency in calves causes blindness and optic nerve hypoplasia. Vitamin A deficiency in adult or growing cattle results in night blindness, mydriasis, and eventually total blindness.





**Pink Eye** - Pinkeye is a common infectious disease affecting the eyes of cattle. The name describes the redness and inflammation of the lining of the eyelid and eyeball. Although pinkeye is non-fatal, it has a marked economic impact on the cattle industry. It is known to occur at all seasons of the year and in all breeds of cattle. One or both eyes may be involved. Excessive weeping of the affected eye and closure due to pain are the two signs most commonly observed. As the disease progresses, the cornea becomes cloudy or white. Cattle with pinkeye keep the affected eye or eyes closed because of

pain and to avoid bright sunlight. They lose weight because they are reluctant to forage for feed and water.

## Other Common Diseases



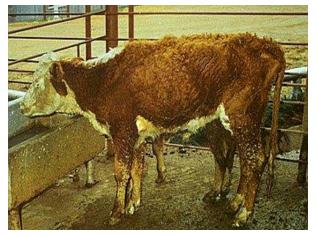
**Lump jaw** –Actinomycosis (hard tissue) and Actinobacillous (soft tissue) or lump jaw produces immovable swellings on the upper and lower jawbones of cattle, commonly at the central molar level. The bacterium invades tissue through breaks in the lining of the mouth caused by eating rough forage. The tumor-like swellings develop slowly and may take several months to reach a noticeable size. Lump jaw may be well advanced before external signs are visible. The lumps consist of honeycombed masses of thin bone filled with yellow pus (Actinomycosis) or abscesses of the soft tissue

(Actinobacillous). If neglected the swellings may become very large.

Difficult breathing due to involvement of the nasal bones may be the first sign. As the disease progresses, chewing becomes more difficult and painful, resulting in loss of condition. Occasionally, the soft tissues of the head and alimentary tract may be involved. Lesions in the alimentary tract give vague symptoms of indigestion, often with chronic bloat. If the disease is detected early, it may be better to treat or salvage the animal while it is still in good condition. Only the head should be condemned by meat inspectors, unless the lesions have spread elsewhere in the body.

**Wooden tongue** is an infection caused by rod-shaped bacterium which lives only in the presence of oxygen. The bacteria, which live in the mouth, invade tissue through breaks in the lining of the mouth. Any rough feed can cause mouth abrasions which allow entry of infection. Wooden tongue occurs almost entirely in soft tissue with the tongue and lymph nodes of the head most often affected. The disease starts suddenly with the tongue becoming hard, swollen and painful. Affected animals drool saliva and may appear to be chewing gently. The tongue often protrudes between the lips and nodules and ulcers may be observed on the tongue. They are unable to eat or drink and rapidly lose condition. The disease is progressive and often fatal unless treated.





**Emaciated animal** – The animal is in poor condition, weak, depressed, gaunt, sunken eyes and a rough hair coat. The muscle may appear glassy and moist and fluid will drip from the neck. Emaciated animals cannot be slaughtered or enter the food chain.

**Non-Ambulatory Cattle - also known as "Downer Cows"** are unable to stand up or walk, even if assisted. The animal may have a disabling condition affecting its central nervous system. The animal may have a back injury or broken legs or paralysis due to difficulty calving. Downer cows cannot be slaughtered and enter the food supply. Non-ambulatory cattle must be handled in a humane manner and euthanized.